



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,510	12/10/2001	Daniel N. Harres	38190/240368	9094
826	7590	06/27/2006	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			GHEBRETINSAE, TEMESGHEN	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

**Office Action Summary****Application No.**

10/016,510

**Applicant(s)**

HARRES, DANIEL N.

**Examiner**

Temesghen Ghebretinsae

**Art Unit**

2611

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8-10,12-16,18-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,12-16,18-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6,8-10,12-16, 18-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art fig.1 and in view of Walker (5,185,765).

Consider claims 1-6, 8-10, 12-16, 18-20,22-24 as claimed now. Admitted prior art fig. 1 discloses a method of transmitting and receiving at least one signal comprising; encoding at least one digital according to a predefined communications standard, wherein encoding comprises encoding the at least one digital signal according to a predefined communications standard having zero content at a DC voltage level; transmitting the at least encoded signal; and receiving the at least encoded signal. Prior art differs from the claimed invention in that the encoded signal is not integrated or differentiated. However, Walker discloses a method for transmitting and receiving at

Art Unit: 2611

least one signal comprising: encoding the at least one digital signal according to a predefined communication standard; integrating the encoded digital signal at the transmitter and thereafter differentiating the integrated signals at the receiver to reduce electromagnetic emissions associated with the high speed data transmission. (See fig.4A and fig. 5A). The prior art and Walker are analogous art because they are from the same filed of endeavor of communication. At the time the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the transmitter and receiver circuit disclosed by the prior art an integrator capable of integrating the at least one encoded digital signal and a differentiator capable of converting the at least one integrated signal into a representation of at least one encoded digital signal. The motivation/suggestion for doing so would have been to reduce electromagnetic emissions associated with high-speed data transmission. (See abstract, col.8, and lines 27-34)

Prior art also discloses a predefined communication standard selected from a group of Manchester encoding as claimed in claims 8,12,18.

Walker also discloses integrating the at least one encoding signal comprising a low pass filter as claimed in claims 4,13 and differentiating the least one integrated signal using a high pass filtering as claimed in claims 5,19. The prior art and Walker are analogous art because they are from the same filed of endeavor of communication. At the time the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the transmitter and receiver circuit disclosed by the prior art an integrator comprising a low pass filter capable of integrating the at least one encoded

Art Unit: 2611

digital signal and a differentiator comprising a high pass filter capable of converting the at least one integrated signal into a representation of at least one encoded digital signal. The motivation/suggestion for doing so would have been to reduce electromagnetic emissions associated with high-speed data transmission. (See abstract, col.8, and lines 27-34)

Walker also discloses a restoring circuit and AC coupling as claimed in claims (2-3,15-16,22-24) to compare the representation to a reference data signal and characterize each individual pulse of the data signals as either a logic "1" or logic "0" and thereby restore the encoded data signals (see fig.4A, 51A, 51b, 50). The prior art and Walker are analogous art because they are from the same filed of endeavor of communication. At the time the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the receiver circuit disclosed by the prior art a restoring and an AC coupling. The motivation/suggestion for doing so would have been to restore the encoded data signals from the representation of the encoded data signals. (See abstract, col.9, line 60 to col.10, line 2).

Walker and prior art also disclose a decoder for decoding the representation of the a least one encoded signal according to a predefined communication standard as claimed in claims 6 and 9.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is 571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6. The examiner can also be reached on alternate.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2611

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.G.

6/23/06.

Temesghen Ghebretinsae  
Primary Examiner  
Art Unit 2611

TEMESGHEH GHEBRETINSAE  
PRIMARY EXAMINER

